

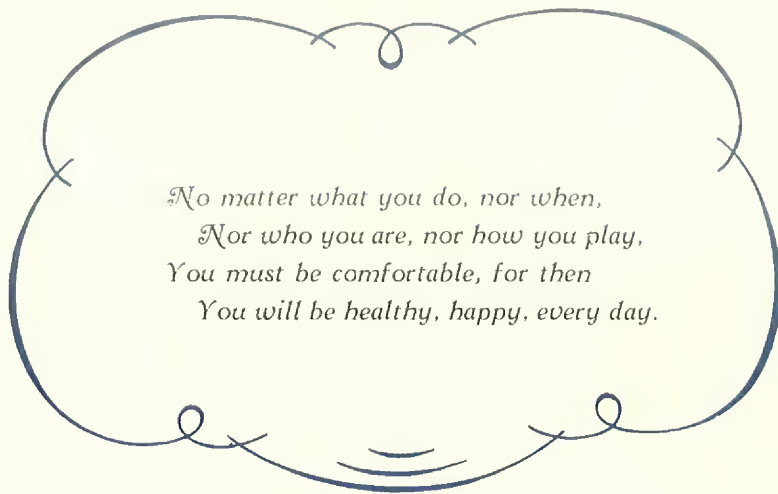
# Your Comfort Comes First!



INTERNATIONAL SELF CLEANING CARTON FURNACE



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*No matter what you do, nor when,  
Nor who you are, nor how you play,  
You must be comfortable, for then  
You will be healthy, happy, every day.*

## *Comfort Is Our First Thought---*

**WE** all live to get the best out of life. Our part is to make the world better and to raise the business of living to the highest levels of convenience and comfort. We daily try to make the homes and hearts of the world full of happiness and brightness by rendering our best services to our fellowmen.

Sometimes we neglect ourselves to make other lives more pleasant. Some of our homes lack modern improvements, affecting our welfare adversely. Still we plod along, trying to make things do work of which they are not capable.

A really beautiful home does not depend so much upon exterior appearance as it does upon a congenial interior. The outside of a house has been likened to a casket that holds a jewel within. And the creation of a home that is beautiful in fact as well as in its furnishings can be accomplished only when comfort, warmth, and a healthful atmosphere have been provided.

Nowadays, on cold mornings, we are not so likely to wake up to discover that Jack Frost has covered our windows with his art work during the night. You undoubtedly recall when homes were not heated as well as they are today—when an old stove had to furnish the warmth for an entire house and some of the rooms had to suffer because the stove couldn't carry the load. It wasn't necessary then to do a "daily dozen" to start the day. The chilly air inside a home was enough to send one into all sorts of positions and motions to get warm.

And so house heating becomes a serious consideration in making our homes more pleasant—more cheerful—and more healthful. Every phase of our lives is secondary to heat, which must be adequate, easily obtained and maintained, clean and moist enough to be healthful. All of this must come to us at a low maintenance cost.

No wonder, then—with all these demands to be met, that it was necessary at the outset to discard the old stove in favor of a modern heating system.

And in building our modern heater, the Self-Cleaning Carton Warm Air Furnace, we have designed it so it would render the greatest satisfaction to you, for we believe that

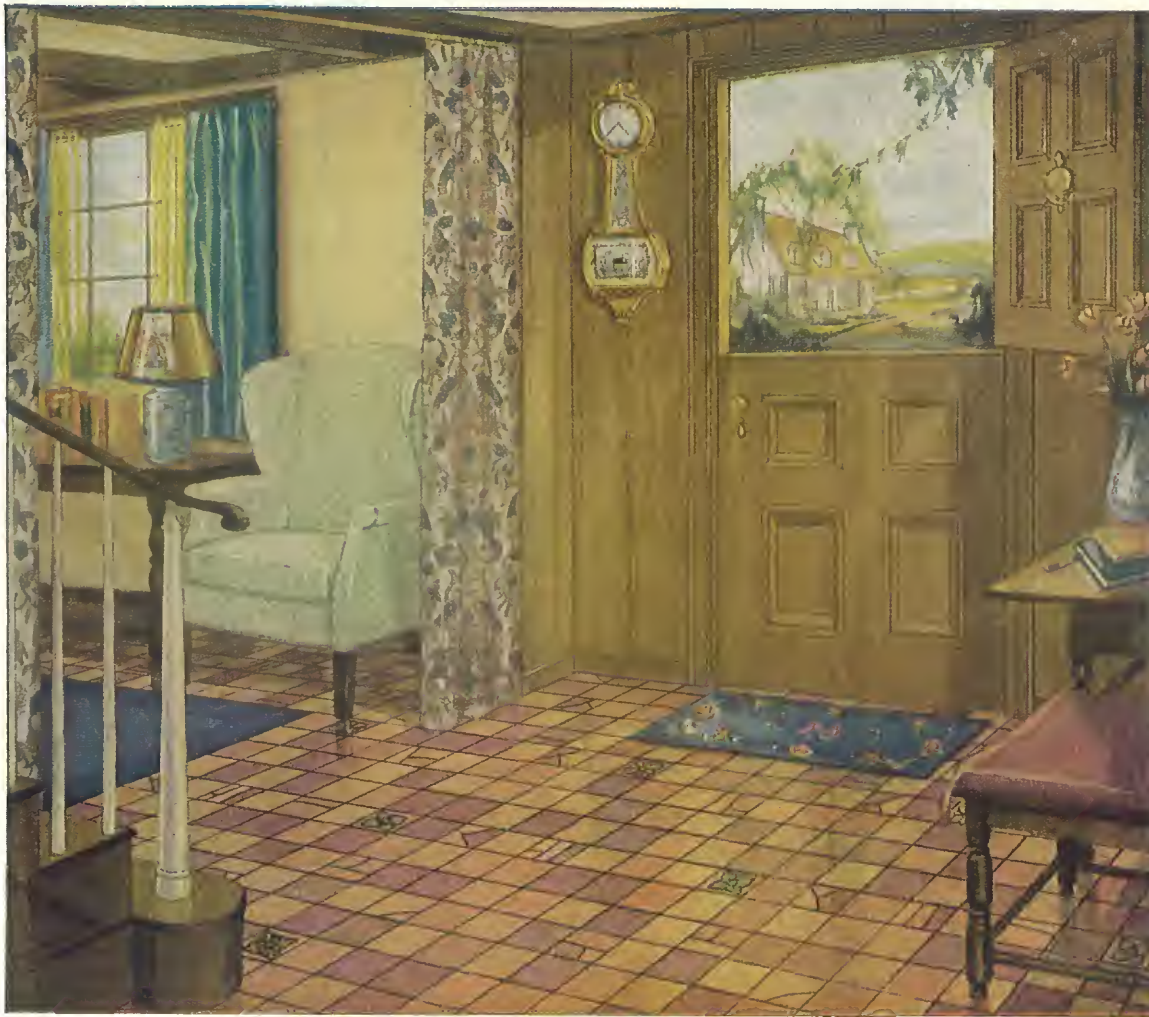
Nothing comes before your comfort!



*Modern in the  
"Frozen Forties"*



## Colorful Homes Are Congenial---



*This entrance hall and living-room of an early American home, with its double Dutch door, beamed ceilings, wood panel walls, and Colonial furnishings, such as the quilted upholstery chair and the banjo clock, suggest a tile floor or the use of a covering of Inlaid Broken Handcraft Tile Linoleum*

**A**LL International dealers have our engineering service available. This department is trained to study room conditions, furniture location, and to avoid conflicts either in register placement or in color usage.

Here a stained wood grille for return air circulation would be placed under the table and the warm air register would be located in the baseboard of the stair wall. Finished in natural wood to melt into the surroundings, these would make a striking example of analogous harmony in the blending of room decorations.



*Plan to include color in your heating plant, too*

## *Self-Cleaning Carton Is Modern---*

**M**ORE than three-quarters of a century ago, John Carton conceived his first warm air heater. It was heralded by the nation as a distinct improvement over the "house-heating stove" which had been popular for so many years. And it was justly looked upon as an improvement, because it was the first heater that would maintain itself as nearly perfect in heating performance as was possible. The original principle which accomplished this unusual result has been retained in an improved form in the present Self-Cleaning Carton Furnace and will be discussed fully later in this booklet.

Just as radios, aeroplanes, passenger trains, electric equipment, and automatic devices of all kinds have been perfected, so have definite advances taken place in the modernization of heating equipment. A certain romance, not unlike that which has accompanied development and progress in other lines of endeavor, has been experienced in the rapid and remarkable perfection of International Heaters.

These forward steps in manufacture have taken place over a long period. The public has always been quick to respond to our advancement in designs by widespread approval of our products until today our warm air heating systems have become increasingly popular and are being adopted to warm all kinds of homes and other structures.

We have co-operated for many years with the Engineering Department of the University of Illinois and the National Warm Air Heating Association in conducting exhaustive tests concerning installation, operation and design of warm air heating systems. This careful engineering work has taken place in a Research Residence, constructed like an ordinary home, where the usual conditions found in most houses have been duplicated. These efforts have produced knowledge which makes it certain that our warm air furnaces will render satisfactory heating results when installed according to the Standard Code which we recommend and endorse.

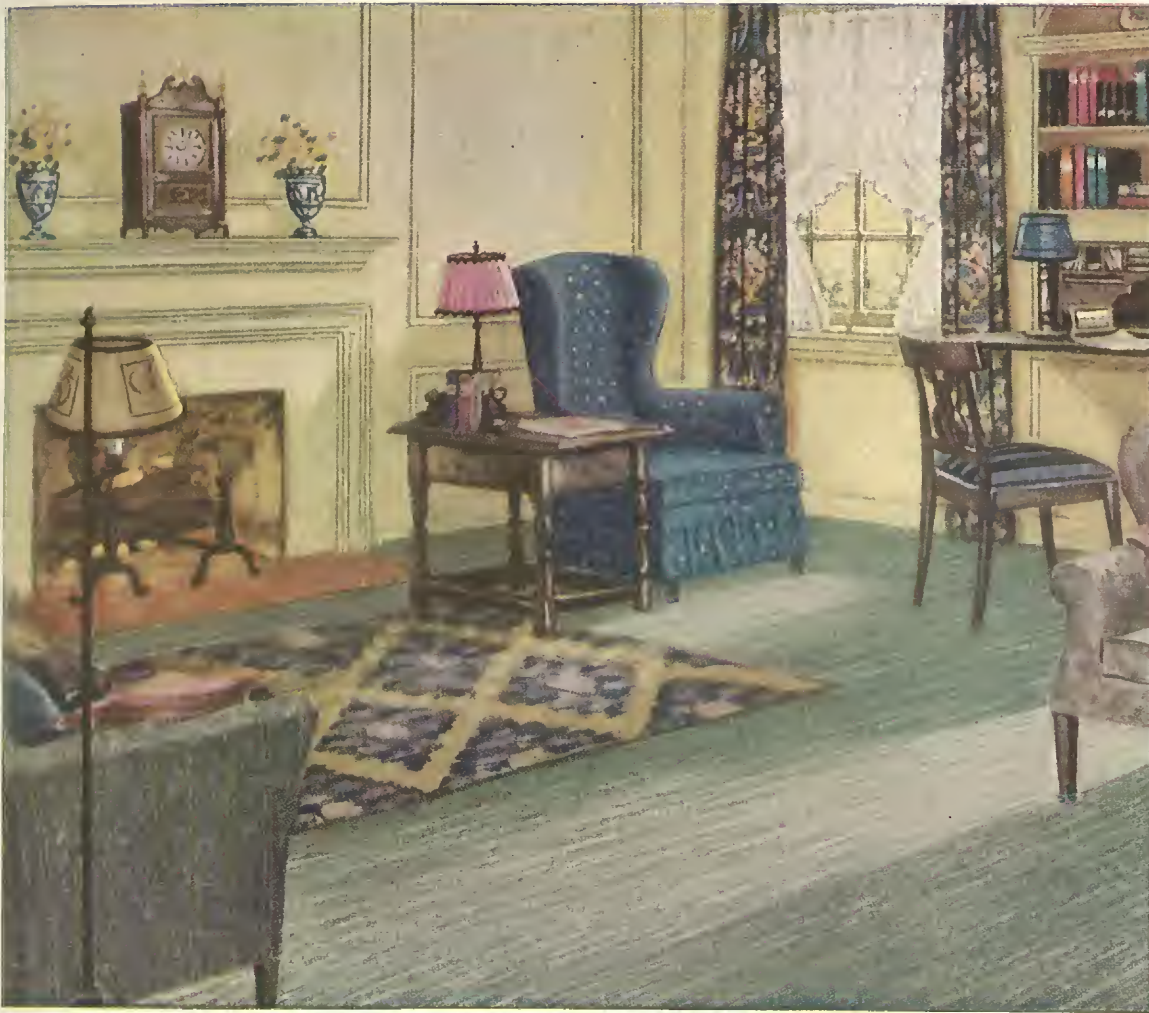


*The Research Residence  
works for you*

Furthermore, we, as a company, guarantee that our warm air heaters will perform certain, definite tasks satisfactorily when installed according to this Code. In addition, we guarantee our furnaces against defects in material and workmanship without time limit. What a world of assurance that gives to the purchaser of our heaters—what confidence he may place in International products!



## Color Will Make Homes Beautiful---



*A hint of the Georgian-Colonial style is conveyed by this living-room. It is a comfortable room, designed to be lived in every hour of the day. As the rugs and draperies are figured, the larger expanses, walls and floors, had to be plain. By selecting a cream for the paneled walls and a gray for the floor, the correct background was obtained, and, at the same time, one with a happy contrast. The color scheme, blue, rose, cream and gray, lends itself to almost any type of room and permits of a variation in the treatment of the warm air or return air registers*

**W**ITH no contrast in the baseboard or trim, the interior of the register box, as well as the face of the register, should be finished by the painter at the time the walls are tinted.

If return air is taken from this room, the finish of the return air face should be gray and the inside of the return air box finished in the same color.



*Comfort brings happiness  
to every home*

## *We Guarantee Entire Satisfaction---*

**T**HUS our guarantee plan, operating on the basis of the Standard Code, makes it possible for International dealers to select the proper size Self-Cleaning Carton Furnace to heat your home. Nothing is left to guesswork. Our research engineers have eliminated the need for "rule of thumb" methods. Self-Cleaning Cartons are as safe investments as the best bonds, for these heaters return increasing dividends of warmth and comfort.

Let there be no misunderstanding of the efficiency of a Self-Cleaning Carton Furnace. Because of its unique construction, it keeps clean all of the time—its heating surfaces are always prime, and absorb all possible heat units from the hot gases, that rise from the firebed, transmitting their full warmth to your home. This unusual performance means decreased fuel bills for you and increased comfort through your knowledge that you are getting full value from the fuel you use.

And to illustrate the faith that may be placed in Self-Cleaning Carton Furnaces:—

Many of those which have been distributed among home owners all over the world, have been in active service from 35 to 60 years, rendering perfect results at very low average maintenance cost. Thus experience has proved the Self-Cleaning Carton to be a time-tested heating apparatus of incalculable worth and durability.

Our factory standards governing the production of Self-Cleaning Carton Furnaces are the highest adopted by any manufacturer in the industry. Every part is rigidly inspected. Every furnace is carefully finished, fitted, and mounted. Every shipment is painstakingly checked over and packed to insure proper handling in transit.

There is no grief attached to the purchase of an International Self-Cleaning Carton Furnace. A perfect apparatus for heating warm air at low fuel and maintenance costs, it comes to you as the finest product of a manufacturer with a record of 87 years of unimpeachable service to the public through the distribution of International products and—



*Painstaking care protects  
against defects*

Nothing can take the place of this remarkable experience!



## Register Faces Should Harmonize---



*In contrast with the Colonial style is this bedroom, in which the design shows the influence of the French. For a background, the walls are covered with a smart, mauve figured paper. Note how well this combination of floor and wall colors sets off the furnishings—French bed with toile linen insets at head and foot, comfortable Normandie arm-chair by the fireplace, small French table and dressing table with its provincial chair. The placing of this dressing table in the window is both practical and interesting*

**O**WING to the location of partitions through which the heat pipes run, baseboard or sidewall registers are generally used in bedrooms. In this case the register box should be colored to match the lower portion of the walls. A diamond-faced register of the same color as the top walls completes the picture.

Should the building construction require the use of a floor register, the finish of both box and register should blend with the taupe floor.



*Consult your dealer—get his estimates*

## *Our New Color Plan Is Practical---*

**W**E have gone further to modernize our heating systems. Through a cooperative idea—the first of its kind to be introduced to the public through our regular trade channels—we have developed a plan which enables our retail representatives to make your heating system a part of your general interior decorations.

The International Heater Company Color Plan includes the use of color-base finish cold air grilles, registers, and register boxes which may be decorated with any kind of paint to match interior walls, trim, or floor coverings.

Now your heating system may be colorful—no longer need be unsightly equipment in your home, if you follow the color plan which will be explained to you by an International dealer and which is briefly described on other pages.

Color is everywhere. Born with our human nature is the instinctive love of color. Recognize this fundamental fact when you plan to install a new heating system or re-design your present plant.

Consult the International dealer in your community—talk over our new color plan with him and let him secure our special color base finish registers for your new heating plant. This improvement in the appearance of your heating system will add no expense to the installation.

The method of heating residences and other structures by freely circulating air has many advantages, including ventilation, humidification, and flexibility under all weather conditions.

Doctors endorse the healthful warmth of heated moist air because of its favorable effect upon our lives. Air in a home must be moist in order to keep us in good physical condition, especially when it is heated. That is why so many physicians are favorable to warm air heating systems.

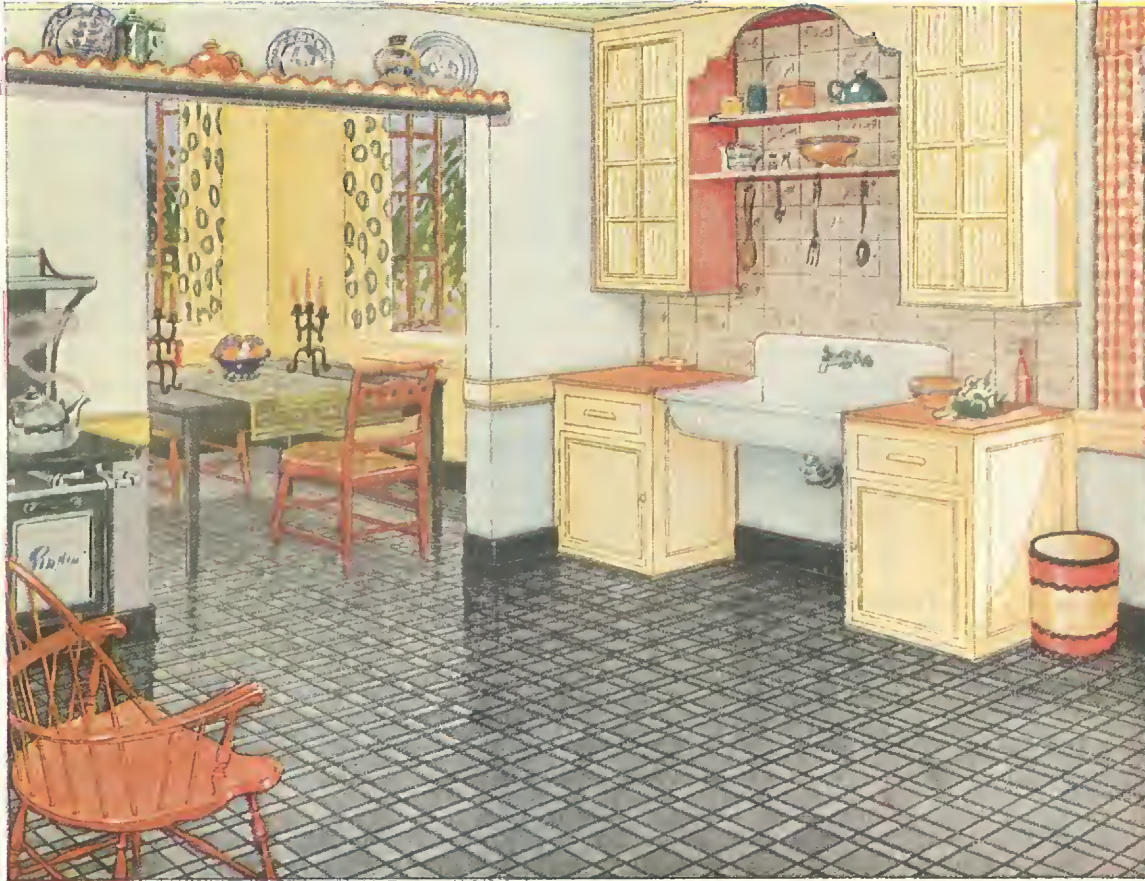
To insure your family's health, simply write your heating specifications as follows: "Install one International Self-Cleaning Carton Furnace in accordance with the Standard Code, all registers to be International Color-Base Finish and tinted by painter to match room decoration," and you have assured yourself of definite heating satisfaction and complete color harmony.



*Doctors endorse warm  
air heating systems*



## Complete Harmony Is Important---

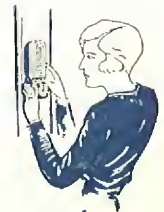


Gaiety in home decoration—if there's one place that needs it, it is the kitchen. But gay colors need a background to blend them, to hold them together. With an Armstrong printed linoleum floor of a neutral tone, such as you see above, any number of color combinations can be used. In this instance cream and red worked out very happily, emphasizing the unusual treatment of cupboards and novel wood plate shelf above the door.

**A** FLOOR register should be placed near the wall where it will be entirely out of the way. With a black japanned enamel finish, it can be cleaned without any evidence of wear in the years to come.

If desired, the warm air register may be placed in the baseboard and should be finished in black to correspond with the floor and baseboard trim.

Complete harmony throughout the decoration of a room will do much toward creating a cheerful atmosphere.



*Automatic regulation helps  
to cut fuel costs*



## *Known As Finest Among Heaters---*

THE International Self-Cleaning Carton Furnace is built with two main objects in view—length of life or durability, and efficiency coupled with ease of operation. It is built for that discriminating class of people who are far-sighted enough to realize that a few additional dollars at the beginning will result in an appreciable saving yearly, to say nothing of the convenience that might be had during the years of usage.

For eighty-seven years the Self-Cleaning Carton has been known as the finest among heaters. It was the first self-cleaning heater with indirect heating surface ever built. Many imitations have been put on the market, but in the vast majority of these the self-cleaning factor has been created at the cost of heating surface and other fundamental principles, which largely govern fuel economy and heating results.

The Carton Furnace in stature is much larger than furnaces of a different type, when the size is compared from the standpoint of the firepot diameter. This method of heater selection cannot possibly give a true comparison, for the standards as previously referred to set up by the Research Department have stated that capacities are directly dependent upon the ratio of the quantity of heating surface to the grate area.

In other words, that furnace which has the larger amount of heating surface above the grate will carry a higher capacity than a furnace having a lesser amount even though the firepot diameters may be the same.

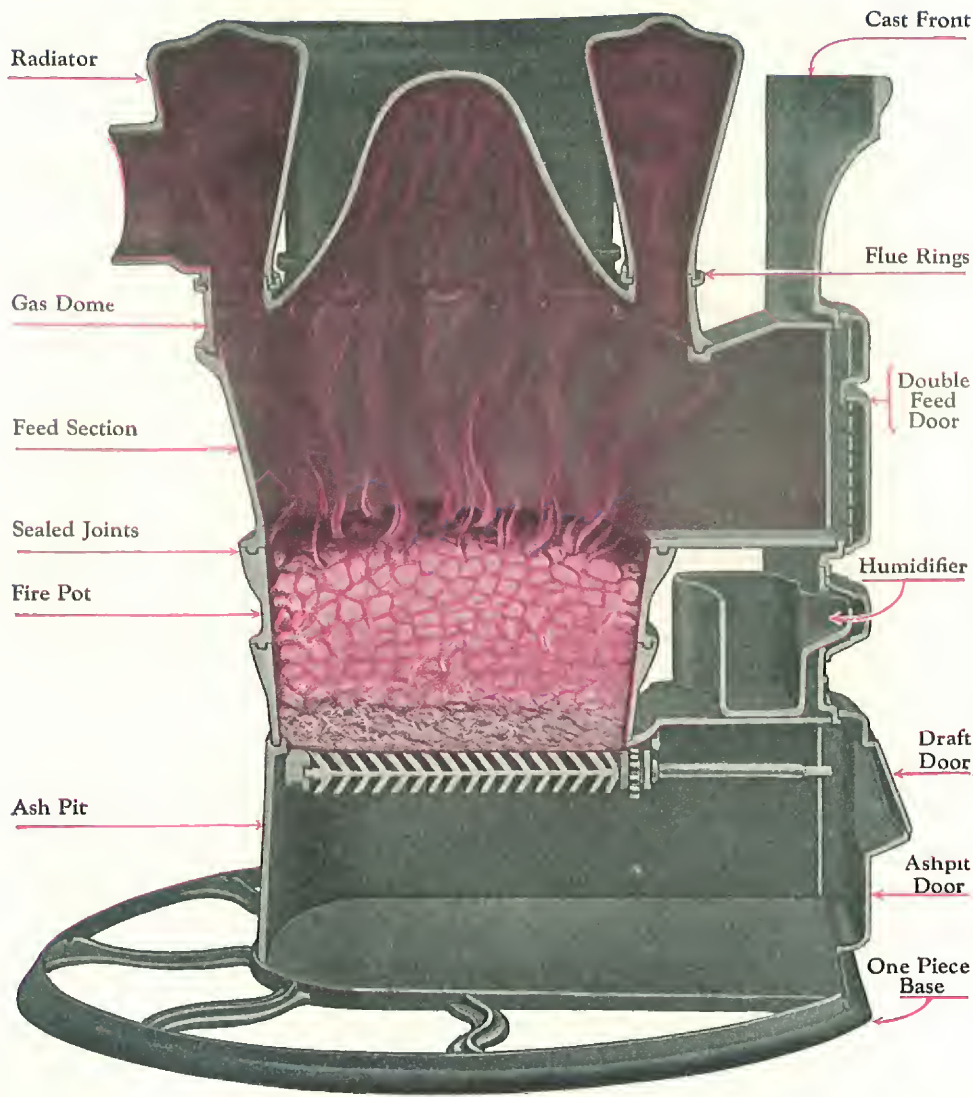
The view shown on the opposite page is that of a Carton Furnace cut in two, and you will see that this furnace differs radically from the ordinary type in that it continues to grow larger in diameter as it increases in height. During severe winter weather the fire may be carried well up into the combustion chamber and still leave ample room to properly burn the gas from the fuel, so that while the Carton Furnace has a great deal more heat surface than the ordinary furnace, it also has a combustion space and a coal-carrying capacity that is even greater than most furnaces that are catalogued of a firepot diameter 4" in excess of the Carton.

Purchase durability, heating efficiency, and ease of operation, rather than firepot diameter.



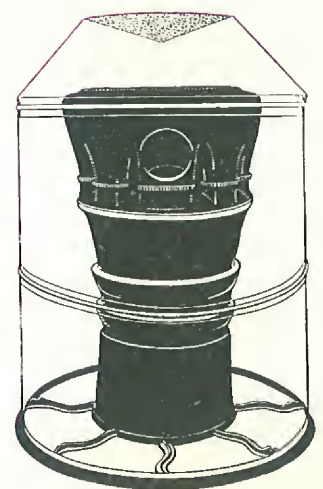
*Our extensive plants use most modern machinery*

# Built to Serve You a Full Lifetime---



*This cutaway view shows the sealed joints—the flaring combustion space, and the distinctive radiator design. Notice the triple seal cement joints and the tremendous weight which locks the cement in position and forever prevents loosening or disintegration*

**T**HE International Carton Self-Cleaning Heater cannot be compared with the ordinary furnace—they do not have anything in common in design—which of itself has so much to do with your heating comfort.



*Diagram to show gradual flure of castings—also relation of these castings to the warm air chamber*



## *Carton Furnace Is Always Clean---*

**I**N most homes the annual house-cleaning is something to be looked upon with dread. This same house-cleaning must be applied to all furnaces that are not of a self-cleaning type, where any fuel is used that produces soot in any form. This one big bugaboo can be done away with forever by the use of Carton Furnaces, for no matter what conditions they are operated under, there is no way in which the Carton can get in such a condition as to require cleaning.

Remember that if the ordinary heater is not cleaned in the non-heating period, the time will come during the heating season when the efficiency falls off, your home is not properly warmed and you have to let the fires go out so as to call in someone to do this, for the soot deposits in the ordinary radiator will eventually block it to such an extent as to reduce the natural chimney draft to such a low point that the fuel will not burn.

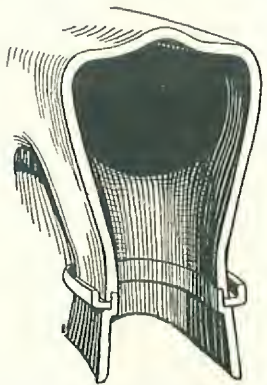
The International Self-Cleaning Carton, with its large combustion chamber and heat-intensifying dome, provides a space in which to place an ample fuel charge and still have room enough left for the proper combustion of the fuel. This is of great importance when burning soft coal, as that fuel requires an enormous amount of air to burn it smokelessly and requires space above the fire bed for that combustion.

When you add a charge of soft coal to the ordinary heater, the volatile matter, which is combustible, ordinarily pours out of the chimney in the form of black smoke.

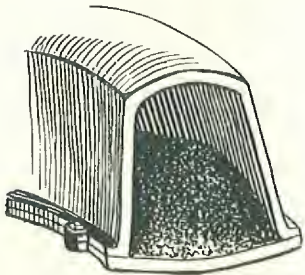
In the Carton Furnace, this smoke, as we will call it, rises to the top of the heat intensifier and then dives back downwards to reach the chimney through the exit ports into the radiator, as shown in the illustration.

Meanwhile oxygen, in the form of air, has been entering the combustion chamber through the slide in the feed door, and it mixes with this black smoke so that a secondary combustion takes place as the mixture leaves the combustion chamber through these outside ports.

With the ordinary furnace there is just one point of exit directly over the fire bed, and the volatiles from the fuel are lost forever as they pass out through this opening in an unbroken stream with nothing to break them up, mix them with oxygen and start this secondary combustion, as is possible with the Carton.



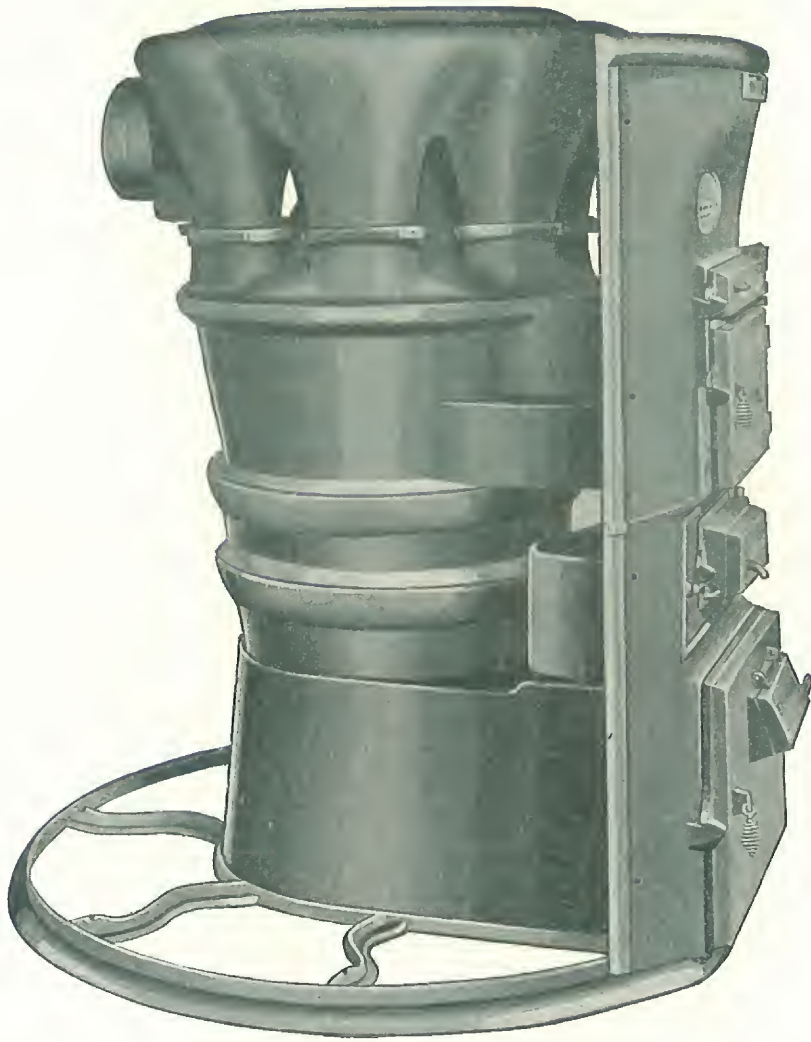
*Cross Section Self-Cleaning  
Carton Radiator*



*Cross Section Ordinary  
Radiator*

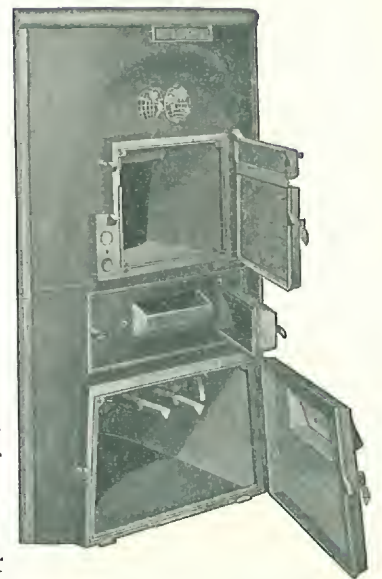


# Deliver Full Value From Fuel---



*This view shows the heater ready for the metal jacket and pipe connections. You can see the massive reinforcement around the firepot cup joints—and get some idea of the tremendous heating surface—while the smaller cut gives you an idea of the large door openings*

**B**ECAUSE of its design, the International Carton Self-Cleaning Heater will not only enable you to burn the fuel more satisfactorily and economically, but will also transfer a greater portion of the heat generated to the rooms above than the ordinary furnace.



*Doors open to illustrate big feed and ashpit doors*

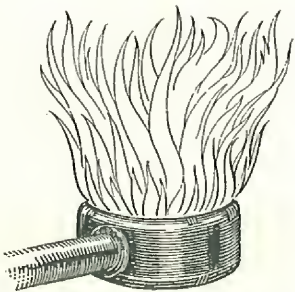
## *Carton Is Ideal for Oil Burning---*

**F**ROM an oil-burning standpoint, it would be hard to select a furnace that is more peculiarly adapted to all the different types of burners that there are today.

One essential of oil burning is to have a large amount of heating surface. Another is to keep from having one single point of exit where the heating effect would be concentrated. A third is to retain the heat generated from burning the oil just as long as possible. Still a fourth is to have a large combustion space, since oil requires many more pounds of air per pound of fuel to be properly burned than does coal.

All of this you have in the International Carton, for the exit ports into the radiator draw the products of combustion to the outside walls of the furnace, distributing the heat as evenly as possible over all of the surface and eliminating the possibility of their escaping as quickly as with most heaters. When the controls operate, the heating effect is immediate and the tremendous heating surface of the Carton Furnace prevents the smoke pipe from being over-heated by quickly absorbing it.

An oil burner of proper design represents a considerable investment—but in turn it gives convenience—an evenly heated home—and a sense of security against the weather no matter how cold it may be. The burner you select deserves a heater in which it can show its best heating results. You can gradually write off your oil burner investment by using the Carton Heater, for its economy of operation over ordinary heaters is very marked when oil is the fuel.



*Oil burners may be used to advantage in Carton Furnaces*

The cement joints of the Carton Furnace are capped so that the cement can neither work loose nor disintegrate in any way. There is no domestic oil burner with sufficient explosive force to lift the Carton castings and destroy this seal in any way, as the weight and distribution of the weight on the Carton castings is such as to eliminate this possibility.

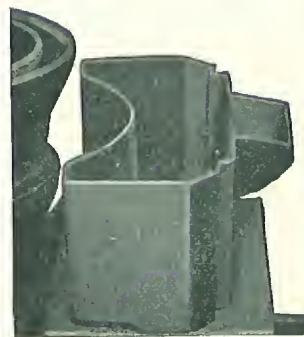
Records are on file showing the use of the International Carton in connection with almost every type of oil burner built, and in every case the construction of the Carton has been given considerable credit for the satisfactory performance of the oil-burning unit.

# Owners Everywhere Endorse Cartons---



*Almost all heaters look alike after the casings are put on. You can then compare them on the points of operating convenience. Even if you had the most efficient heater made you would be dissatisfied if you had to fire it often—if you had to fuss with small feed and ashpit doors—and if the general care of it were a drudgery*

**T**HE name "Self-Cleaning Carton" on a heater in your basement will be a source of satisfaction to you always. There is no way in which it can clog up with soot and it always seems to have that extra capacity when the temperature drops away down!



*Humidifier keeps air moist and healthful*



## Select Cartons for Large Buildings---

IN churches, auditoriums, or halls of any description, where heat is not maintained constantly, the International Carton Furnace is particularly adapted.

In such buildings the heating up period is confined to a very short while, and under those conditions the strain on any heating apparatus is very great.

The fires are built up beyond the normal rate and the ordinary heater with an average amount of heating surface to absorb the heat generated is placed in a dangerous position as far as the life of the castings is concerned.

The Carton Self-Cleaning Heater, by reason of its design and the quantity of heating surface, will take care of an overload more efficiently and with less danger of doing any damage to the castings than any heater that we know of.

In the ordinary heater, with its small combustion chamber, the coal-carrying space is reduced, and with its single exit for the products of combustion, the heat is necessarily concentrated on the firepots and feed sections under forced firing conditions. Frequent attention is required.

### *Comfort Guaranteed*

We guarantee that INTERNATIONAL Self-Cleaning Carton Warm Air Furnaces will deliver their full rated heat pipe capacities when installed according to the Standard Code Regulating the Installation of Warm Air Furnaces, approved by the National Warm Air Heating Association, and using recirculated air. When so installed we guarantee the proper heating of the building.

This guarantee is contingent upon the use of fuel of at least 11,500 B.t.u. value, a chimney providing sufficient draft to properly burn the fuel, and the building being of not less than the average grade of construction. We furthermore guarantee all parts of this Heater against defects of material or workmanship without time limit.

*Our Guarantee is backed  
without any reservations*

When the Self-Cleaning Carton is fired under the same conditions, the heat generated is distributed over all parts of the feed sections, gas domes, lower radiators and upper radiators. Hence the heat generated is absorbed for use in the space being heated and there is no particular strain placed upon any one part.

If the type of building is such as to require a fan, the design and amount of heating surface on the Carton are again put to a big advantage.

A fan will drive the air through the casings faster than it will flow by gravity, and since air has to pass over a surface to pick up its heat, the arrangement of heating surface on the Carton Self-Cleaning Furnace is particularly advantageous to its use.

When unusual conditions are met, select the Carton Self-Cleaning Heater to make sure of definite results.

## *Every Carton Part Is Efficient---*

**M**OST people confess to a profound ignorance with reference to the warm air furnace—and its component parts. Perhaps it is just as well, for they might get lost in a maze of technicalities that would not have any bearing on their immediate needs.

The International Carton Self-Cleaning Heater is so distinctive in build that there are but few points of comparison with the ordinary heater, but they each at least have grate bars—and there are many types of grate bars made and many extravagant claims put forth for each.

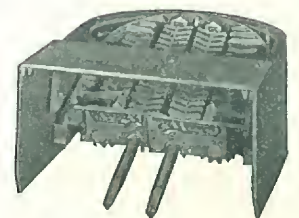
The grates of the Carton are of a patented design—triangular in shape with teeth sloping backwards in a herringbone pattern. The bars revolve in opposite directions and the action of these teeth becomes a shearing one—like a pair of scissors—cutting away small clinkers and grinding the ash as through a mill.

Because of the human element, the laxity in handling any furnace—grate bars are considered necessary repairs—and yet such replacements are always due to carelessness in operation. The most expensive part of grate replacement is often the labor of chiseling off a bolt—screw or cotter pin that has become warped or burned.

Such a condition cannot arise with a Carton grate. It is hung in a full drop frame without the use of a bolt, nut, screw or cotter pin and any bar may be replaced without the use of a tool of any nature. It may even be replaced without removing the fire from the heater and the entire grate may be dropped by releasing a catch for cleaning the fire completely in Fall and Spring when fresh fires are often built.

Thus, the removal of ashes is made as easy as possible and much of the unpleasantness of tending a furnace is removed.

Users in all parts of the country endorse and approve the Self-Cleaning Carton type of grates as being the most satisfactory to operate under all kinds of conditions. They are reliable and certain in their action and very easily shaken.



*Triangular grates are easy to operate*

## Proper Combustion Is Provided---

OWING to the shape of the combustion chamber, it becomes a continuation of the firepot, providing extra space for an additional charge of fuel in the event sudden severe weather is encountered, and also giving ample room for the proper combustion of that fuel.

The ordinary combustion chamber, instead of flaring out as does the Carton, draws in to one single point of exit into the radiator, reducing the available coal-carrying capacity and making it difficult to properly burn the fuel.

This Carton combustion chamber is not subjected to any undue strain, as is sometimes the case with an ordinary heater, since there is no flat surface directly above the fire, and the weight of the radiator is distributed around the outside walls, providing a vertical support rather than a horizontal one.

Directly above the feed chute is the large cone-shaped heat intensifier. The greater volume of hot gases generated from the fire rise to the center of this dome and then have to dive downwards in order to reach the exit ports into the radiator.

It is a direct check against unburned gases in the form of black smoke escaping up the chimney, as this forces a thorough mixing above the fire with an ignition of the mixture taking place as it encounters the flames from the fire just before leaving the combustion chamber.

A combination of these two parts has a great deal to do with the ease of operation, heating effect, and fuel-saving qualities of the Self-Cleaning Carton.

Distinctly different from the ordinary types, they not only provide the additional fuel and combustion space, but they also furnish heating surface where it is most needed.

The advantage of this properly arranged heating surface lies in the ready transmission of heat to the air as it flows over the hot castings on its way through the heater, making it possible to raise room temperatures quickly.



*Radiator and intensifier absorb all heat possible*



*Extra large combustion chamber is efficient*



## No Soot Collects In Cartons---

THE Self-Cleaning Carton Radiator is so different in design from the ordinary type that it requires but little explanation.

The important thing is that no soot can gather on the vertical surfaces and there are no horizontal surfaces for the soot to pile up on. If there is any soot or fine ash carried up into the radiator, it immediately falls back on the fire and the soot is consumed, as soot is combustible matter.

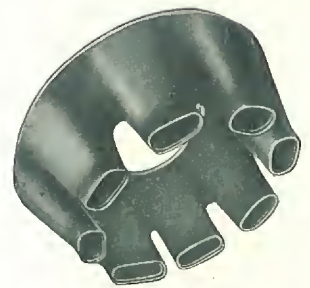
This radiator has several openings directly over the outside walls of the combustion chamber, and the radiant heat from the fire can shine up through these openings clear to the top of the radiator. The heat from the fire is always drawn against the outside walls which absorb the heat generated and transmit it to the rooms above.

In building the Carton firepots, particular attention was paid to the cement retaining ring to eliminate forever the possibility of any smoke or gas leakage or loosening of the cement.

The illustration shows the firepots to have sloping shoulders from these cup joints, so that at no point is there a sharp corner. In this manner the firepots are protected against what is called rim-checking, even though coke be used under forced firing conditions; and we mention coke because it gives off a very high firepot temperature.

Carton firepots are made as nearly straight as possible to prevent the ash lodging against them and to provide as large a grate as possible. This can be done only because of the tremendous heating surface that is available to absorb the heat.

Again we say, do not select a heater from firepot diameter alone, as you must take into consideration grate area, combustion space and total heating surface. Use the Carton "Standard Code" official ratings. They take all these factors into account and can be definitely relied upon to warm your home with the least attention and the greatest fuel economy possible.



*Sturdy radiator cleans itself thoroughly*



*Upper and lower firepots are heavy*

## *Insist Upon Satisfactory Work---*

**F**INALLY, what interests you most, when you select your heating plant, is performance and the lasting qualities of the heater. In every state of the Union and in many foreign countries as well, are International Heaters whose records for performance are unapproachable. Through 86 years of manufacture, the durability of International Heaters has been time-tested and proved.

Throughout the world Self-Cleaning Carton Furnaces have established records of service of from 35 to 65 years, during which maintenance costs have been negligible.

An important factor which bears upon the installation of a new heating plant is the selection of a competent heating contractor. He is the one with whom you are to deal. Choose the International dealer who will exercise thought and care in the placement of your heating unit and the decoration of the entire plant. Instruct him to figure your new system according to the Standard Code, for it is your assurance of heating satisfaction and winter comfort.

International dealers, pledged to install furnaces carefully, are usually the most competent contractors in town. If, for any reason, your local contractor does not feel fully qualified to decide upon your particular problem, he knows of the service offered by our Engineering Department and will not hesitate to make this service available to you when necessary.

There is no warm air heater made better than the Self-Cleaning Carton Furnace. The installation of one in the building which you must heat will more than prove this fact, upon which thousands of owners all over the world have agreed.



# Official Ratings and Specifications---

NATIONAL WARM AIR HEATING ASSOCIATION				
*Official Measurements and Ratings				
No. of Furnace	Heating Surface Sq. In.	Grate Area Sq. In.	Ratio Heating Surface Grate Area	Guaranteed *Rating Sq. In. of Heat Pipe
20443	<b>5539</b>	254	<b>21.8</b>	461
22483	<b>6947</b>	310	<b>22.4</b>	569
24523	<b>7613</b>	380	<b>20.0</b>	665
26563	<b>9070</b>	456	<b>19.9</b>	796
28603	<b>11285</b>	526	<b>21.5</b>	949
060	<b>13504</b>	700	<b>19.3</b>	1208

\* These measurements of heating surface and grate area and calculation of rating were made by disinterested engineers employed by the National Warm Air Heating Association, are certified to as correct by that Association, and all data in connection with such certification are on file for public reference at the Association's office at Columbus, Ohio. These ratings are determined by using the formula published in the Fourth Edition of The Standard Code Regulating the Installation of Warm Air Furnaces.

## Data

#No. of Furnace	Diam. of Firepot	Diam. of Casing	Diam. of Grate	Height of Castings	Diam. of Smoke Collar	Height of Front	Size of Feed Door Inches	Height—Floor to Center of Smoke Outlet	Coal Carrying Capacity Lbs.
20443	20"	44"	18"	51 $\frac{3}{4}$ "	8"	50"	11 $\frac{1}{2}$ x 13	44 $\frac{1}{2}$ "	140
22483	22"	48"	20"	54"	8"	52 $\frac{1}{8}$ "	12x15	46"	185
24523	24"	52"	22"	56 $\frac{1}{2}$ "	8"	54 $\frac{1}{4}$ "	12x15	46 $\frac{3}{4}$ "	205
26563	26"	56"	24"	60 $\frac{1}{4}$ "	9"	58 $\frac{3}{8}$ "	12x15	49 $\frac{1}{4}$ "	270
28603	28"	60"	26"	67 $\frac{1}{2}$ "	9"	65 $\frac{1}{4}$ "	12x15	56 $\frac{1}{2}$ "	365
†060	33"	60"	30"	72"	10"	53"	12x15	60 $\frac{3}{4}$ "	525

The height of cased furnaces is approximately 14 inches higher than the castings.

† Size 060 has single Feed Door only.

\* Numbers of the Carton Furnace when equipped with Lignite Grates are: 20441, 22481, 24521, 26561, and 28601.

## Double Casing Measurements

No.	LOWER GALV.		UPPER GALV.		LOWER LINING		UPPER LINING	
	Length	Width	Length	Width	Length	Width	Length	Width
20443	9' 3 $\frac{1}{4}$ "	25"	9' 3 $\frac{1}{4}$ "	23"	9' 3 $\frac{1}{4}$ "	13"	9' 3 $\frac{1}{4}$ "	23 $\frac{3}{8}$ "
22483	10' 2 $\frac{5}{8}$ "	25"	10' 2 $\frac{5}{8}$ "	25"	10' 2 $\frac{5}{8}$ "	13"	10' 2 $\frac{5}{8}$ "	25 $\frac{3}{8}$ "
24523	11' 2 $\frac{1}{4}$ "	26"	11' 2 $\frac{1}{4}$ "	26"	11' 2 $\frac{1}{4}$ "	13"	11' 2 $\frac{1}{4}$ "	26 $\frac{3}{8}$ "
26563	12'	28"	12'	28 $\frac{1}{2}$ "	12'	13"	12'	29 $\frac{1}{8}$ "
28603	12' 10 $\frac{3}{4}$ "	30"	12' 10 $\frac{3}{4}$ "	33"	12' 10 $\frac{3}{4}$ "	15"	12' 10 $\frac{3}{4}$ "	33 $\frac{5}{8}$ "
*060	12' 4 $\frac{1}{2}$ "	29 $\frac{1}{2}$ "	15' 9 $\frac{3}{8}$ "	17"	12' 4 $\frac{1}{2}$ "	30 $\frac{1}{2}$ "	15' 7 $\frac{3}{8}$ "	17 $\frac{5}{8}$ "
			MIDDLE GALV.		MIDDLE LINING			
			Length	Width	Length	Width		
*060			12' 4 $\frac{1}{2}$ "	21"	12' 4 $\frac{1}{2}$ "	21 $\frac{5}{8}$ "		

\* 060 Casings are made in three sections—lower, middle and upper.



# 63, 56, 26, 25---Years Ago---

Home of Miss Katherine Eichmeyer  
Utica, N. Y.

International Heater Company  
444 Lafayette St.  
Utica, New York  
October 27, 1923

Gentlemen:

The Cast-iron Furnace which is heating my home has had more a long record of excellent service than I thought you would be interested in hearing about it.

When I bought my home in 1900, it already had been built for 37 years. I understood that the Cast-iron Furnace was installed by the builder in 1903, as the furnace was 37 years old when I moved in.

You can imagine how well satisfied I have been with this furnace when I tell you that I have had only one or two minor repair bills. Practically all the parts of the furnace are the original ones. Over 20 years old and heating my home with complete comfort on 6 to 8 tons of coal a year.

I think this is a record for low upkeep cost. Can it be broken?

Yours truly,  
Miss Katherine Eichmeyer

Home of J. C. Collins  
Olean, N. Y.

THE ROGERS FURNACE CO.  
HEATING CONTRACTORS

Dear Sirs:

I have pleasure in writing you to say that the Cast-iron Furnace which is heating my home has had more a long record of excellent service than I thought you would be interested in hearing about it.

When I bought my home in 1900, it already had been built for 37 years. I understood that the Cast-iron Furnace was installed by the builder in 1903, as the furnace was 37 years old when I moved in.

You can imagine how well satisfied I have been with this furnace when I tell you that I have had only one or two minor repair bills. Practically all the parts of the furnace are the original ones. Over 20 years old and heating my home with complete comfort on 6 to 8 tons of coal a year.

I think this is a record for low upkeep cost. Can it be broken?

Yours truly,  
Miss Katherine Eichmeyer

Reliance Life Insurance Company  
of Pittsburgh, Pennsylvania  
James J. Bond, President

CHAS. P. UNVERFERTH  
DAYTON, OHIO

October 10th, 1924.

International Heater Company,  
Utica, N.Y.

Gentlemen:

In reply to your inquiry as to why the Cast-iron Furnace installed in my residence 20 years ago has never failed to give entire satisfaction.

The only reason ever mentioned was replacing the same, occasioned by rust.

When built, a Cast-iron Furnace was installed in my residence, and that was it. I have never had any trouble with it, and it is still heating the day as well as the day it was installed 27 years ago.

Yours very truly,  
Chas. P. Unverferth  
GENERAL AGENT

W. F. MURPHY  
LOW BRIDGE

International Heater Co.  
Utica, N. Y.

I have pleasure in writing the following statement:

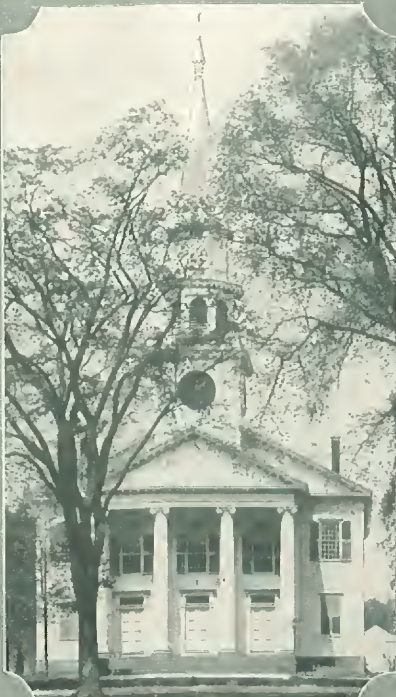
In the Fall of 1907 I purchased a Cast-iron Furnace manufactured by The Rogers Furnace Co. of Utica, N. Y. The furnace has been in my home ever since and has given me the most perfect service that I could expect. It has never failed to give me the most perfect service that I could expect. It has never failed to give me the most perfect service that I could expect.

Yours truly,  
W. F. Murphy

Home of Charles P. Unverferth  
Dayton, Ohio

Home of W. F. Murphy  
Iowa City, Iowa

# Unaffected By Forced Firing---



First Congregational Church  
Guilford, Conn.



INTERIOR, ST. ANN'S  
CHURCH  
MONTEREY, IND.

Monterey, Ind.,  
June 11, 1923.  
The International Bldg. Co.,  
Chicago, Ill.

Sir:-  
After a year's trial of the old  
Castles Chimney, installed by the late  
Pastor Jesse B. in St. Ann's Church,  
Monterey, Ind., I must say that it has  
given me satisfaction, even during  
the worst days of winter and that  
I was comfortable. I also find your  
plumbers more economical than  
the old one it replaced. Being such  
results, your furnace deserves  
high recommendation -  
Yours very truly,  
Ed. B. Longen



St. Ann's Church, Monterey, Ind.



Danbury M. E. Church, Danbury, Conn. Heated by two International Cartons



# Satisfactory In All Details---



Residence of G. H. Kellogg  
Brighton, N. Y.



Residence of C. M. Ellington  
Buffalo, Ill.



Residence of Jent G. Thorne  
Clinton, Iowa



Home of Russell K. Smith  
Penfield, N. Y.

JENT G THORNE  
AND ASSOCIATED ENGINEERS  
MUNICIPAL ENGINEERS  
DESIGN SUPERVISION AND MANAGEMENT  
PAVEMENTS SEWER AND WATER SYSTEMS  
BY WOODS BROS

C. F. ARMSTRONG & SONS, CLINTON, IOWA November 23, 1924  
Clinton, Iowa.

Gentlemen:-

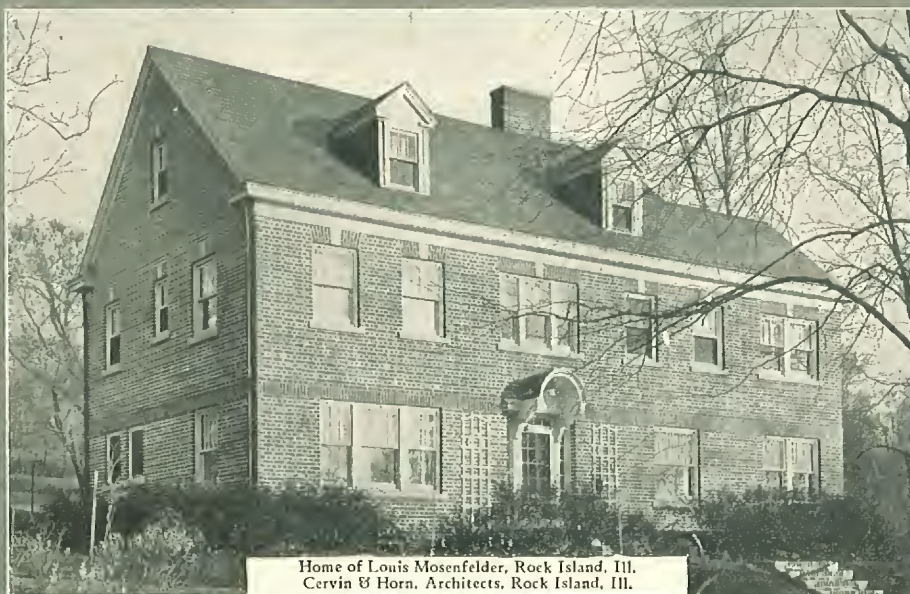
The International-Carton ware air furnace which you installed in my residence in the Fall of 1921 has given excellent service. This furnace is a simple one to operate and, being controlled by an automatic heat regulator, gives us an even temperature at all times, which is delightful.

*Jent G. Thorne*  
Jent G. Thorne.

Residence, 655 Fifth Avenue.



Home of Thomas Brokenshire  
East Rochester, N. Y.



Home of Louis Mosenfelder, Rock Island, Ill.  
Cervin & Horn, Architects, Rock Island, Ill.

*M&K*

TIP TOE OUTFITTERS  
FOR ALL MAKING

ROCK ISLAND, ILL.  
November 1, 1924

International Heater Co., Chicago, Ill.  
Dear Sirs:

I take pleasure in recommending the International Carton furnace No. 583 to the fullest extent. I have recently erected a new nine room house, the living room of which is 16 by 26, and the other rooms and hall are in proportion in size, and during the winter of 1923-24 we consumed 3 tons of petroleum carbon, 2 tons of Kentucky lump, and 3 cords of wood, which was a little more than half of the amount of fuel consumed in a smaller home which I previously occupied.

Your furnace has proven unexpectedly satisfactory in every detail, because I was skeptical about being able to heat as large a house with warm air, and am pleased with the little effort it requires to heat our house.

LM:NG

Yours truly,

*Louis Mosenfelder*





